SIN MEN KHEN, inzh.; SADOV, F.I., prof.

Dye tranfer to the fabric in machine printing. Tekst.prom. 21 no.1:36-39 Ja '61. (MIRA 14:3)

(Textile printing)

SADOV, F.I.; BOLDENKO, A.R.

Preparing "nitron" fibers for dyeing. Tekst.prom. 21 no.6:58-62 Je '61. (MIRA 15:2)

(Dyes and dyeing--Cellulose)

SADOV, F.I., prof.

"Dyeing of cotton fibers for the manufacture of blended fabrics"
by G.E.Sladkopevtseva, N.A.Shubina. Reviewed by F.I.Sadov.
Tekst.prom. 21 no.9:86-87 S '61. (MIRA 14:10)

1. Moskovskiy tekstil'nyy institut.
(Dyes and dyeing—Cotton) (Textile fabrics)
(Sladkopevtseva, G.E.) (Shubina, N.A.)

SADOV, F.I., prof.; BOLDENKO, A.R., aspirant

Dyeing of "nitron" fibers processed with hydrogen peroxide.
Tekst.prom. 21 no.12:44-46 D '61. (MIRA 15:2)

1. Zaveduyushchiy kafedroy khimicheskoy tekhnologii voloknistykh materialov Moskovskogo tekstil'nogo instituta (for Sadov).
2. Kafedra khimicheskoy tekhnologii voloknistykh materialov Moskovskogo tekstil'nogo instituta (for Boldenko).
(Dyes and dyeing—Cellulose)

KRICHEVSKIY, G.Ye.; SADOV, F.I.

Methods of determining carboxyl groups in cellulosic materials. Izv. vys. ucheb. zav.; tekh. teks. prom. no. 2:115-119 '61. (MIRA 14:5)

1. Moskovskiy tekstil'nyy institut.
(Cellulose--Testing)

KRICHEVSKIY, G.Ye.; SADOV, F.I.

Studying the dyeing of cellulose fibers with active dyes. Report No.1: Mechanism of the reaction of active dyes with the functional groups of the elementary chains of cellulose and some other natural polysaccharides. Izv.vys,ucheb.zav.; tekh.tekst.prom. no.3:102-109 '61. (MIRA 14:7)

1. Moskovskiy tekstil'nyy institut.
(Dyes and dyeing--Cellulose)

KRISHEVSKIY, G.Ye.; SADOV, F.I.

Studying the dyeing of cellulose fibers with active dyes. Report No.2. Reaction capacity of the primary and secondary hydroxyl groups of cellulose glucose residue. Izv.vys.ucheb.zav.; tekh.-tekst.prom. no.4:91-96 '61. (MIRA 14:9)

1. Moskovskiy tekstil'nyy institut.
(Dyes and dyeing--Cellulose) (Hydroxyl groups)

SADOV, F.I., prof.; KALININA, K.C., dotsent; Prinimali uchastiye:
SHESTERNINA, P., studentka; KOSTANDI, L.A., student

Role of surface active agents in the dyeing of acetate rayon fabrics with dispersed dyes. Tekst.prom. 21 no.9:51-53 S '61.
(MIRA 14:10)

1. Moskovskiy tekstil'nyy institut.
(Dyes and dyeing—Rayon)
(Surface-active agents)

SADOV, F.I., doktor tekhn.nauk, prof.; KALININA, K.G., dotsent, kand.tekhn.
nauk; SHESTERNINA, G.P., inzh.

Effect of surface-active substances on the dyeability of acetate fibers with dispersions dyes. Izv.vys.ucheb.zav.; tekh.leg.prom. no.1:56-65 '62. (MIRA 15:2)

1. Moskovskiy tekstil'nyy institut (for Sadov, Kalinina). 2. Novo-Noginskaya tkatskootdelochnaya fabrika (for Shesternina).
(Dyes and dyeing—Rayon)(Surface-active agents)

VIL'DT, Ye.O.; KRESTNIKOVA, N.I.; OVECHKIS, N.S.; SADOV, F.I.

Development of the three-color printing on fabrics. Izv. vys. ucheb. zav.; tekh. tekst. prom. no.3:120-127 '62. (MIRA 17:10)

KON'KOV, P.I.; SADOV, F.I.

Evaluation and selection of thickeners for the two-phase printing with vat dyes. Report No.3. Izv. vys. ucheb. zav.; tekh. tekst. prom. no.4:111-115 '64. (MIRA 17:12)

1. Moskovskiy tekstil'nyy institut.

KRICHEVSKIY, G.Ye., prepodavatel'; SADOV, F.I., prof.

Continuous methods of dyeing cellulose fiber fabrics with dichlorotriazine active dyes. Tekst.prom. 22 no.2:48-52 F '62.
(MIRA 15:3)

1. Moskovskiy tekstil'nyy institut.
(Dyes and dyeing--Cellulose)

SADOV, F.I., prof., doktor tekhn. nauk; KRICHEVSKIY, G.Ye., prepodavatel'

Active dyes. Tekst. prom. 22 no.7:47-54 Jl '62. (MIRA 17:1)

1. Moskovskiy tekstil'nyy institut.

SADOV, F.I., prof., doktor tekhn.nauk; KRICHEVSKIY, G.Ye., assistent, kand.tekhn.nauk

Quantitative determining of the reactive and hydrolized forms in technical active dyes. Tekst.prom. 22 no.9:29-31 S '62. (MIRA 15:9)

1. Moskovskiy tekstil'nyy institut.
(Dyes and dyeing--Chemistry)

VIL'DT, Ye.O.; KRESTNIKOVA, N.I.; OVECHKIS, N.S.; SADOV, F.I.

Development of the three-color textile printing; color gamut of the color triad for three-color printing. Izv.vys.ucheb.zav.; tekh.tekst. prom. no.1:103-109 '63. (MIRA 16:4)

1. Moskovskiy tekstil'nyy institut.
(Textile printing)

SADOV, F.I.; KALININA, K.G.; NAZAROVA, Ye.P.

Vat color printing of fabrics made from acetate fibers. Izv.vys. ucheb.zav.; tekh.tekst.prom. no.2:107-111 '63. (MIRA 16:6)

1. Moskovskiy tekstil'nyy institut.
(Textile printing) (Rayon)

BALASHOVA, T.D.; SADOV, F.I.

Studying the removal of hydrolized active dyes from dyed cellulose fibers. Report No.2. Izv.vys. ucheb. zav.; tekh. tekst. prom. no.6:130-135 '63 (MIRA 17:8)

1. Moskovskiy tekstil'nyy institut.

NOVORADOVSKAYA, T.S., aspirant; SADOV, F.I., prof.

Use of sodium chloride for the bleaching of fibers made from polyvinyl alcohol. Tekst. prom. 23 no.10:14-18 O '63. (MIRA 17:1)

1. Moskovskiy tekstil'nyy institut.

GANDURIN, L.I., aspirant; SADOV, F.I., prof.

Investigating various reducing agents under the conditions of two-phase printing with vat dyes. Tekst. prom. 23 no.12: 55-59 D '63. (MIRA 17:1)

1. Kafedra khimicheskoy tekhnologii voloknistykh materialov Moskovskogo tekstil'nogo instituta.

SADOV, F.I., prof.; GANDURIN, L.I., aspirant

Investigating various reducing agents under the conditions of the two-phase metnod of vat dye printing. Tekst.prom. 24 no.1: 72-77 Ja '64. (MIRA 17:3)

1. Moskovskiy tekstil'nyy institut.

SADOV, F.I., prof.; BALASHOVA, T.D., aspirantka

Effect of additives on the desorption of hydrolyzed active dyes from dyed cellulose fabrics. Tekst. prom. 24 no.2 58-61 F '64. (MIRA 17:3)

1. Moskovskiy tekstil'nyy institut.

KON'KOV, P.I.; SAIKOV, F.I.

Physical properties of the thickeners for the two-phase printing method with vat colors. Report No.2. Izv. vys. ucheb. zav.; tekh. teks. prom. no.3:102-108 '64. (MIRA 17:10)

1. Moskovskiy tekstil'nyy institut.

SADOV, F.I., prof.; BALASHOVA, T.D., aspirantka

Analyzing the process of desorption of hydrolized active dyes from dyed cellulose fibers. Tekst. prom. 24 no.4:61-63 Ap '64. (MIRA 17:6)

1. Moskovskiy tekstil'nyy institut.

SADOV, F.I., prof.; KALININA, K.G., kand. tekhn. nauk; IL'INSKAYA, T.M., inzh.

Preparation and dyeing of blended fabrics made from acetate and viscose fibers. Tekst. prom. 24 no.9:45-48 S '64.
(MIRA 17:11)

1. Moskovskiy tekstil'nyy institut.

SADOV, F.I., doktor tekhn. nauk, prof.; CHAPLINA, N.D.; IVLIYEV, V.G.; LUR'YE, A.L.; ABEZGUZ, A.Ya.; DYNIN, F.M.; ESKIN, I.L.; VASIL'YEV, G.V.; GAL'PERIN, M.M., retsenzent; IL'INSKIY, N.S., retsenzent; MORYGANOV, P.V., doktor tekhn. nauk, prof., retsenzent; MOSHKIN, V.I., retsenzent; RUDAKOV, D.N., retsenzent; TSVETKOV, M.N., retsenzent; DUKHOVNYY, F.N., red.

[Design and planning of finishing factories for the cotton industry] Proektirovanie otdelochnykh fabrik khlopchatobumazhnoi promyshlennosti. Moskva, Legkaia industriia, 1965. 355 p. (MIRA 18:7)

EFROS, R.D., aspirant; SADOV, F.I., prof.

Simultaneous dyeing with dichlorotriazine dyes and finishing with synthetic resins. Tekst. prom. 25 no.4:45-48 Ap '65. (MIRA 18:5)

1. Moskovskiy tekstil'nyy institut.

SADOV, F.I.; MIKHAYLOV, P.V.; GLAZKOVSKIY, Yu.V.

Using the chemical and spectral analysis methods in studying the process of alkali saponification of polyacrylonitrile. Izv. vys. ucheb. zav.; tekh. tekst. prom. no.4:91-97 '65. (MIRA 18:9)

1. Moskovskiy tekstil'nyy institut.

EFROS, R.D., aspirant; SADOV, F.I., prof.

Alkali and acid hydrolysis of the coloring obtained by the method of simultaneous dyeing and finishing. Tekst. prom. 25 no.8:56-58 Ag '65. (MIRA 18:9)

1. Moskovskiy tekstil'nyy institut.

ROSINSKAYA, TS.Ya., aspirantka; SADOV, F.I., prof.

Effect of pH on the selectivity of vat dyes. Tekst. prom. 25 no.10:58-61 O '65. (MIRA 18:10)

1. Moskovskiy tekstil'nyy institut.

VIL'DT, Ye.O.; SADOV, F.I.; SENAKHOVA, R.V.; SAFRONOVA, L.I.

Evaluating the degree of dye take-up by favrics in printing and dyeing. Izv. vys. ucheb. zav.; tekh. teks. prom. no.6: 76-80 '65. (MIRA 19:1)

1. Moskovskiy tekstil'nyy institut. Submitted April 3, 1965.

MIKHAYLOV, P.V., nauchnyy sotrudnik; GRIBINA, T.K., nauchnyy sotrudnik;
SADOV, F.I., prof.

Use of the products of alkali saponification of polyacrilontrile in the sizing of yarn. Tekst. prom. 25 no.9:42-44 S '65.
(MIRA 18:10)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut sinteticheskogo volokna (for Mikhaylov, Gribina). 2. Moskovskiy tekstil'nyy institut (for Sadov).

VIL'DT, Ye.G.; ALYAVDIN, N.A.; SADOV, F.I.

Composite diagram of viscosity - shearing stress - velocity gradient for thickeners and printing inks. Koll. zhur. 27 no.6:810-814 N-D '65. (MIRA 18:12)

1. Moskovskiy tekstil'nyy institut. Submitted February 17, 1964.

L 24723-66 EWT(m)/EWP(j)/T RM

ACC NR: AP6009561 (A) SOURCE CODE: UR/0413/66/000/005/0151/0151

INVENTOR: Matetskiy, A. I.; Sadov, F. I. 26

ORG: none

TITLE: Method of dyeing polyester and other synthetic fibers. Class 8, No. 151669

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 5, 1966, 151

TOPIC TAGS: fiber, synthetic fiber, polyester fiber, dye

ABSTRACT: An Author Certificate has been issued describing a method for dyeing polyester and other synthetic fibers using steam. In order to improve both the process and the quality of the product, the dye is premixed with alkylolamide and diluted with water or an aqueous solution of the electrolyte to form dispersions and solution. [LD]

SUB CODE: 11/ SUBM DATE: 20Oct61/

Card 1/1

SADOVSKIY, G.

New waterway. Rech. transp. 23 no.7:5-8 Jl '64.
(MIRA 17:10)

1. Nachal'nik Glavnogo upravleniya vodnykh putey i gidrosooruzheniy.

SADOV, I.A.

Influence of conditions of roe incubation on the development of young sturgeon and stellated sturgeon [sevruga]. Trudy Inst.morf.zhiv. no.5:129-146 '51.

(MLRA 6:9)
(Sturgeons)

SADOV, I. A;KOKHANSKAYA, Ye. M.

Nature of division of sturgeon roe produced by hypophyseal injection. Doklady Akad. nauk SSSR 83 no.6:937-940 21 Apr. 1952.
(CLML 22:2)

1. Presented by Academician A. I. Oparin 22 February 1952.
2. Institute of Animal Morphology imeni A. N. Severtsov, Academy of Sciences USSR.

SADOV, I.A.; KOKHANSKAYA, Ye.M.

Interrelation between the type of sturgeon egg fission, the first three cellular divisions, and the structure of the emerging larvae. Dokl. AN SSSR 93 no.6:1135-1138 D '53. (MLRA 6:12)

1. Predstavleno akademikom Ye.N.Pavlovskim.
(Sturgeons) (Embryology--Fishes)

SADOV, I. A.

USSR/General Biology - Individual Development. Sex Cells. B.

Abs Jour : Ref Zhur - Biol., No 21, 1958, 94609

Author : Sadov, I.A.

Inst : Leningrad University.

Title : On Some Problems of the Sperm and Eggcell Structures in Sturgeon.

Orig Pub : V sb.: Probl. sovrem. embriologii, L., Un-t, 1956, 18-19

Abstract : The structure of membranes and some aspects of egg fertility in sturgeon are described.

Card 1/1

SADOV, I.A.

Micropyle formation in oocytes of Acipenseridae. Dokl.AN SSSR
111 no.6:1400-1402 D '56. (MIRA 10:3)

1. Institut morfologii zhivotnykh im. A.N. Severtsova Akademii nauk
SSSR.Predstavleno akademikom Ye. N. Pavlovskim.
(Sturgeons) (Oogenesis)

SADOV, I.A.

Formation of perivitelline space in oocytes of Acipenseridae. Dokl. AN SSSR 112 no.1:174-176 Ja '57. (MLRA 10:2)

1. Institut morfologii zhivotnykh imeni A.N.Severtsova Akademii nauk SSSR. Predstavleno akademikom Ye.N.Pavlovskim.
(Oogenesis) (Sturgeons)

SADOV, I.A.

Variations observed in the size of nuclei in the growth and
maturation stage of oocytes in Acipenser huso, A. güldenstaedtii
and A. stellatus. Dokl. AN SSSR 112 no.2:359-362 Ja '57. (MLRA 10:4)

1. Institut morfologii zhivotnykh im. A. N. Severtsova Akademii
nauk SSSR. Predstavleno akademikom Ye. N. Pavlovskim.
(Sturgeon) (Oogenesis)

AUTHOR: Sadov, I. A. SOV/20-120-6-58/59

TITLE: On the Development of the Membranes Deprived of Cellular Structure in the Oocytes of Acipenser güldenstaedti, A. stellatus and A. ruthenus (O razvitii obolochek ovotsitov osetra, sevryugi i sterlyadi)

PERIODICAL: Doklady Akademii nauk SSSR, 1958, Vol. 120, Nr 6, pp 1374 - 1376 (USSR)

ABSTRACT: Conclusions are drawn concerning the origin of the zona radiata interna and externa or of the alveolar membrane (sotovaya obolochka) of the sturgeon roe more from the similarity of their development with that of other vertebrates than on the basis of previous investigations (Refs 1,2,4). It was the author's object to investigate the development of the said roe on the basis of the IInd, IIIrd, IVth, and Vth stage of the gonad maturity. The author found in contrast to the data of Ol'shvang (Ref 2) that the oocytes of all three mentioned sturgeons are already covered with layer of follicular- and connective tissue cells when their diameter has not yet attained 50μ. The membranes do not become thicker in the IVth stage of maturity (a short

Card 1/4

time before the ovulation). The membranes deprived of cellular structure (nekletochnyye obolochki Pl.): the external or alveolar membrane, the zona radiata interna and externa appear later during the vitelline accumulation in the oocytes. The author assumes the homology of the fertilization sheath of mammals and amphibia with the hyaline (svetlyy sloy) layer of the sturgeon roe (according to V.Zalenskiy, Ref 1). According to Nel'sen (O.Nelsen, Ref 6) this true vitelline membrane is an ooplasm derivative. In the case of other vertebrates the hyaline layer is not separated, but diluted and solved, and takes part in the formation of the perivitelline liquid. A dissolving takes place as well in the case of the sturgeons according to (Ref 1) and the author's observations. According to references 1-4 the zona radiata interna and externa are ooplasm derivatives as well. The external membrane is a derivative of the follicular membrane. In contrast to this the zona radiata in the case of reptiles, birds, and mammals is according to Nel'sen (Ref 6) a derivative of the follicular cells. In the case of Teleostae the zona

On the Development of the Membranes Deprived of SOV/20-120-6 58/59
Cellular Structure in the Oocytes of Acipenser güldenstaedti, A.stellatus and A.ruthenus

radiata interna is assumed to be a derivative of the follicular cells. At the same time the opinion is heard that the zones are derivatives of the ooplasm. The author was able to find by means of his investigations that the oocytes of the sturgeons in the IVth stage of maturity of the gonad are covered by the following 6 envelopes (Fig 1): 1) the first is the epithelial envelope, 2) then follows the vascular envelope, 3) then the follicular envelope, and between the two last mentioned 4) the membrane; then the envelopes lying in the direction of the center of the ovum: 5) the external or alveolar envelope, and finally 6) zona radiata externa and interna. They are all of follicular origin. There is moreover a hyaline cytoplasmic layer - the true vitelline membrane which is an ooplasm derivative. There are 3 figures and 9 references, 7 of which are Soviet.

ASSOCIATION: Institut morfologii zhivotnykh im.A.N.Severtsova, Akademii nauk SSSR (Institute of Animal Morphology imeni A.N.Severtsov, AS USSR)

Card 3/4

On the Development of the Membranes Deprived of Cellular Structure in the Oocytes of Acipenser güldenstaedti, A. stellatus and A. ruthenus SOV/20-120-6-58/59

PRESENTED: February 12, 1958, by Ye. N. Pavlovskiy, Member, Academy of Sciences, USSR

SUBMITTED: October 29, 1956

1. Eggs--Structural analysis 2. Eggs--Physiology 3. Tissues (Biology)--Development

Card 4/4

SADOV, I.A.; KOKHANSKAYA, Ye.M.

Incubation of sturgeon eggs in troughs. Trudy Inst. morf. zhiv. no.37:5-66 '61. (MIRA 14:10)
(FISH CULTURE) (STURGEONS)

SADOV, I.A.

Structure and formation of egg membranes in sturgeons and some representatives of bony fishes. Trudy Inst. morf. zhiv. no.38: 110-188 '63. (MIRA 16:10)

BRYLEYEV, A.M.; FONAREV, N.M.; SHISHLYAKOV, A.V.; PENKIN, N.F.; ARSHAVSKIY, S.L.; SADOV, I.Ya., red.; VERINA, G.P., tekhn. red.

[Automatic locomotive signaling with continuous automatic stop according to the system developed by the Central Scientific Research Institute] Avtomaticheskaia lokomotivnaia signalizatsiia s nepreryvnym avtostopom sistemy TSNII. Moskva. Gos. transp. zhel-dor. izd-vo, 1952, 190 p. (Moscow. Vsesoiuznyi nauchno-issledovatel'skii institut zheleznodorozhnogo transporta. Trudy, no.52).

(Railroads--Signaling) (MIRA 11:6)

(Railroads--Automatic train control)

LEONOV, A.A.; SADOV, I.Ya., redaktor; VERINA, G.P., tekhnicheskiy redaktor

[Electromechanic's handbook of automatic locomotive signaling and automatic train stops] Rukovodstvo elektromekhaniku avtomaticheskoi lokomotivnoi signalizatsii i avtostopov. Moskva, Gos. transp. zheldor. izd-vo, 1952. 275 p. [Microfilm] (MLRA 9:7)
(Railroads--Signaling)

RYAZANTSEV, B.S.; MITIN, A.T.; BUZINIER, M.I.; SADOV, I.Ya., redaktor;
VERINA, G.P., tekhnicheskiy redaktor.

[Organization of railroad signaling and communications] Organizatsiia khoziaistva signalizatsii i sviazi zheleznykh dorog. Moskva, Gos. transp. zhel-dor. izd-vo, 1952. 318 p. (MLRA 7:11)
(Railroads--Signaling) (Railroads--Communication systems)

FEDOT'YEV, P.V.; SADOV, I.Ya., redaktor.

[Signaling, interlocking control, block systems. Vol. 1. Independently-acting signal, staff, semiautomatic block and mechanical interlocking systems] Signalizatsiia, tsentralizatsiia, blokirovka. T.1. Nezavisimo-deistvuiushchaia signalizatsiia. Zhezlovaia sistema. Poluavtomaticheskaia blokirovka i mekhanicheskaia tsentralizatsiia. Moskva, Gos. transportnoe zheleznodorozhnoe izd-vo, 1952. 502 p. (MLRA 6:11)

(Railroads--Signaling)

USKOV, V.F., elektromekhanik STSB 2-y distantsii Kalininskoy dorogi;
SADOV, I.Ya., inzhener, redaktor; MATSEYEVSKAYA, Ye.M., tekhnicheskiy
redaktor.

[Experience servicing installations of the signal, central control
and block systems of a railroad section] Opyt obsluzhivaniia ustroistv
STsB na okolotke. Moskva, Gos. transp. zheldor. izd-vo, 1953. 34 p.
[Microfilm] (MLRA 7:11)
(Railroads--Signaling)

SADOV, I.YA.

NELEPETS, V.S.; TSUKKERMAN, L.P.; METTAS, N.A., inzhener, redaktor; SADOV, I.Ya., inzhener, redaktor; VERINA, G.P., tekhnicheskiy redaktor.

[The servicing of railroad radio installations] Obsluzhivanie zheleznodorozhnykh radioustroistv. Pod red. N.A.Mettas. Moskva, Gos. transp. zheldor. izd-vo, 1953. 107 p. (MLRA 8:1)
(Radio--Installation in trains)

MARUSHKO, F.I.; STAROSTINA, N.V.; PENKIN, N.T., kandidat tekhnicheskikh nauk, redaktor; SADOV, I.Ya., inzhener, redaktor; VERINA, G.P., tekhnicheskiy redaktor.

[Central dispatching systems] Dispetcherskaia tsentralizatsiia. Moskva, Gos. transp. zhel-dor. izd-vo, 1953. 254 p. [Microfilm]
(Railroads--Train dispatching) (MLRA 7:11)

MURAVIN, Veniamin Moiseyevich; SADOV, I.Ya., inzhener, redaktor; YUDZON,
D.M., tekhnicheskiy redaktor.

[Relays for railroad signaling, central control and block systems and
their repair] Rele STsB i ikh remont. Moskva, Gos. transp. zhel-dor.
izd-vo, 1954. 231 p. [Microfilm] (MLRA 7:11)
(Railroads--Signaling) (Electric relays)

LEONOV, Arkadiy Aleksandrovich; SADOV, I.Ya., inzhener, redaktor;
KANDYKIN, A.Ye, tekhnicheskiy redaktor.

[Maintenance of automatic locomotive signal system and automatic train stops] Obsluzhivanie avtomaticheskoi likomotivnoi signalizatsii i avtostopov. Moskva, Gos.transp.zhel-dor. izd-vo 1955. 106 p. (MLRA 8:11)

(Railroads--Signaling)

TANTSYURA, A.A.; KRASNIKOV, M.P.; SOBOLEV, V.Ya.; SADOV, I.Ya., inzhener, redaktor; KHITROV, P.A., tekhnicheskiy redaktor.

[Automatic point type locomotive signal systems with automatic train stop] Avtomaticheskaia lokomotivnaia signalizatsiia tochechnogo tipa s avtostopom. Moskva, Gos. transportnoe zhel-dor. izd-vo, 1955. 124 p. (Vsesoiuznyi nauchno-issledovatel'skii institut zheleznodorozhnogo transporta. Trudy, no.108). (MIRA 9:2)

(Railroads--Signaling)

MEYERSON, Samuil Yudovich; SADOV, I.Ya., inzhener, redaktor; YUDZON,
S.M., tekhnicheskiy redaktor

[Automatic locomotive signalling and automatic stops] Avtomaticheskaia lokomotivnaia signalizatsiia i avtostopy. Moskva, Gos. transportnoe zhel-dor. Izd-vo, 1955. 130 p. (MLRA 8:6)
(Railroads--Automatic train control)

KRYUCHKOV, Vladimir Feofanovich; ORLOV, Nikolay Aleksandrovich; SADOV, I.Ya., inzhener redaktor; KHITROV, P.A., tekhnicheskiy redaktor

[Telegraph operator's manual] Posobie telegrafistu. Moskva, Gos. transp. zhel-dor. izd-vo, 1955. 226 p. [Microfilm] (MLRA 8:6)
(Telegraph--Operators' manuals)

KUKIN,A.N.; SADOV,I.Ya.; inzhener; redaktor; KHITROV,P.A.; tekhnicheskiy
redaktor.

New techniques in Thermit welding. Trudy TSNII MPS no.102:3-61 '55.
(MLRA 8:7)
(Welding) (Thermit)

SADOV, I. Ye.

"Derivation of Crystalline Glucose from Starch." Sub 21 Mar 51, Moscow Technological Inst of the Food Industry.

Dissertations presented for science and engineering degrees in Moscow during 1951.

SO: Sum. No. 480, 9 May 55.

L 05096-67 EWT(d)/EWP(l) IJP(c) BB/GG

ACC NR: AP6013291 30 B SOURCE CODE: UR/0413/66/000/008/0086/0086

AUTHORS: Bovkun, K. A.; Sadov, L. S.; Rabotenko, G. F.; Bardadym, A. G.; Rybal'chenko, A. A.

ORG: none

TITLE: A potentiometer-integrator. 16 0 Class 42, No. 180819 [announced by Dnepropetrovsk Branch of the Institute of Automation (Dnepropetrovskiy filial instituta avtomatiki)]

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 8, 1966, 86

TOPIC TAGS: potentiometer, electric measuring instrument

ABSTRACT: This Author Certificate presents a potentiometer-integrator containing an electronic potentiometer. The design provides for recording of both the current value of the parameter and its average value over a fixed time interval on a single plot. A secondary slide wire is connected to the measuring circuit of the potentiometer (see Fig. 1). The sliding arm of this secondary slide wire is connected through a kinematic coupling to a ratchet. It is also connected by a switch for periodically cutting off the sliding arm of the main slide wire at

Card 1/2 UDC: 681.14

L 05096-67

ACC NR: AP6013291

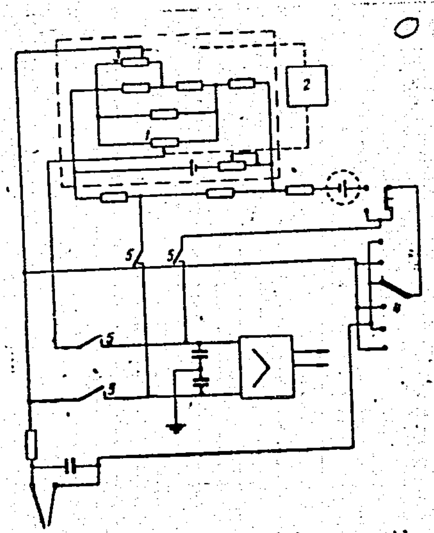


Fig. 1. 1 - secondary slide wire;
2 - kinematic coupling with the ratchet;
3 - main slide wire; 4 - switch;
5 - relay contacts

the reference position by short-circuiting the amplifier input. In this way the sliding arm of the secondary slide wire is periodically shifted to the value proportional to the position of the sliding arm of the main slide wire. In doing this the summation and storage of the average value of the input parameter is accomplished. Orig. art. has: 1 figure.

Card 2/2 SUB CODE: 09/ SUBM DATE: 21Mar64 vmb

KARPOV, L.I., kand.tekhn.nauk; GOL'DSHMIDT, V.G., prepodavatel';
GARIN, G.M.; BULYGIN, V.M.; SADOV, M.V., prepodavatel'

Consultation. Tekst.prom. 20 no.8:76-79 Ag '60. (MIRA 13:9)

1. Kostromskoy tekstil'nyy institut (for Gol'dshmidt). 2. Nachal'nik remontno-montazhnogo otdela Otdelochnoy fabriki Krasnovolzhskogo kombinata (for Garin). 3. Instruktor-rikhtovshchik Tbilisskoy fabriki kotonnykh chulok (for Bulygin). 4. Kiyevskoye uchilishche prikladnogo iskusstva (for Sadov).

(Textile machinery)

SADOV, Ye.N.

Bending pipes by high frequency induction heating. Stroi. truboprov. 6 no.9:20-21 S '61. (MIRA 14:9)
(Pipe bending) (Induction heating)

gas which is a function of the stream parameters and the magnetic field H; c_p is the specific heat at constant pressure; c is the velocity of light; and g is the mass transport per unit area. Using the substitutions

$$v = \frac{u^2}{U_0^2}, \quad s = \frac{RT}{u^2} = \frac{1}{\gamma M^2}, \quad q = \frac{uH}{cE}, \quad dy = \frac{\sigma E^2}{gU_0^2}dx \qquad (2.1)$$

where γ is the specific heat ratio, and assuming that $s = av^n$, it is shown that

$$y = \frac{v}{2[2\alpha - 1 + 2n(\alpha - 1)]}\left[4\alpha^2(1 + n)s + 4\alpha(1 + n) + \frac{1}{(1 - n)s}\right] + C \qquad (n \neq 1)$$

$$y = \frac{v}{2(4\alpha - 3)}\left(8\alpha^2 s + 8\alpha + \frac{\ln s}{s}\right) + C \qquad (n = 1) \qquad (2.5)$$

and

$$q = \frac{1 + (2n + 1)s}{1 + 2\alpha(n + 1)s} \qquad (2.6)$$

Card 2/4 where $\alpha = \gamma/(\gamma - 1)$.

This is the parametric solution of the problem. It gives the velocity, temperature and magnetic field distribution along the duct. It is shown that, depending on the magnitude of n the motion can be accelerated or decelerated. Accelerated motion occurs when

$$(2\alpha - 1) + 2n(\alpha - 1) > 0, \quad \text{or} \quad k < \gamma$$

where k is the polytropic index. The problem of finding the optimum motion is formulated as follows: it is required to find the flow which is described by Eq.(1.1) and is such that for given initial values of u and T, and given the final temperature T, the velocity obtained at the end of a given length should be the maximum. Differential equations are formulated for this problem and their solution is shown to be (in parametric form):

$$v = Ae^{4\alpha r} r^{-4(\alpha - 1)} \qquad (r = 1 - q)$$

$$s = - 2r^{4\alpha-2} e^{-4\alpha r} \int_{-\infty}^{r} e^{4\alpha r} r^{2-4\alpha} dr + Br^{4\alpha-2} e^{-4\alpha r} \qquad (3.10)$$

Some cases of motion of a conducting... S/207/62/000/006/003/025
E032/E114

$$y = A\left[e^{4\alpha r} r^{3-4\alpha} - (4\alpha r - 2\alpha + 1)\int_{-\infty}^{r} e^{4\alpha r} r^{2-4\alpha} dr + 2\alpha Br\right] + C \qquad (3.10)$$

where A, B and C are constants of integration. This solution determines the optimum motion for the gas of constant conductivity.

There are 3 figures.

SUBMITTED: July 6, 1962

Card 4/4

S/075/61/016/001/005/019
B013/B055

AUTHORS: Zaykovskiy, F. V. and Sadova, G. F.

TITLE: Photometric Determination of Rare-earth Elements Using Salicylfluorone

PERIODICAL: Zhurnal analiticheskoy khimii, 1961, Vol. 16, No. 1, pp. 29-31

TEXT: The present publication describes a method for the photometric determination of rare-earth elements using a new reagent, Salicylfluorone [9-(o-hydroxy-phenyl) 2,3,7-trihydroxy-fluorone]. V. A. Nazarenko and M. B. Shustova suggested this reagent for the photometric determination of thorium and sulfates. The pH at which the most intensive color develops with Salicylfluorone in solutions of rare-earth elements was determined by experiments with cerium and yttrium. As may be seen in Fig. 1, cerium forms a colored compound with Salicylfluorone at a higher pH than yttrium. The optical density of cerium- and yttrium Salicylfluoronate solutions was found to be the most stable at pH 6.7 - 6.8. A 20% hexamethylene-tetramine solution was used as buffer. An increase in pH leads to an undesirable increase in the optical density of the reagent.

Card 1/3

Photometric Determination of Rare-earth Elements Using Salicylfluorone S/075/61/016/001/005/019
B013/B055

At pH 6.8, the molar extinction coefficient of solutions of the Salicylfluorone complexes of cerium, samarium and lutecium was, in the average, 17500. The quantity of Salicylfluorone required for maximum color intensity of the cerium complex is 0.75 - 1 ml of an 0.2% alcoholic solution to 25 ml of sample solution (Fig. 2). The solutions of these rare-earth complexes with Salicylfluorone obey Beer's law. The error caused by the presence of major quantities of two rare-earth elements in the ore or mineral for analysis is insignificant in photometric determination of the total rare earth elements. With Salicylfluorone, just as with Arsenazo, yttrium forms intensely colored complex solutions having practically double the optical density of the corresponding cerium complex solutions (Fig. 3). Fig. 4 represents the straight calibration curves for the cerium- and the yttrium group. At an yttrium content of only 10 - 15% of the total of rare-earth elements the slopes of the cerium- and the yttrium group calibration curves do not differ substantially. Calcium and magnesium, which interfere in the photometric determination of rare-earth elements by forming colored compounds with Salicylfluorone, may be masked with sulfosalicylic acid. The results obtained in rare-earth determinations in the presence of large amounts of calcium are very accurate and satis-

Card 2/3

Photometric Determination of Rare-earth Elements Using Salicylfluorone

S/075/61/016/001/005/019
B013/B055

factorily reproducible (Tab. 1). Iron (II) and (III), titanium (IV), thorium, zirconium and uranium also form colored complexes with Salicylfluorone the solutions of which obey Beer's law (Figs. 5 and 6). In comparison to Arsenazo I, Salicylfluorone shows much higher selectivity. Determination of the total rare-earth content in barium- and magnesium alloys does not require previous separation of the chief constituents (Table 2), the error thus incurred being within permissible limits. V. I. Kuznetsov is mentioned. There are 6 figures, 2 tables, and 3 Soviet references.

ASSOCIATION: Vsesoyuznyy institut mineral'nogo syr'ya, Moskva (All-Union Institute of Mineral Raw Materials, Moscow)

SUBMITTED: September 28, 1959

Card 3/3

ZAYKOVSKIY, F.V.; FURTOVA, Ye.V.; SADOVA, G.F.

Separation of rare earth elements from materials containing iron, calcium, and phosphates. Zhur.anal.khim. 17 no.2:202-205 Mr-Ap '62. (MIRA 15:4)

1. All-Union Institute of Mineral Raw Materials, Moscow.
(Rare earths--Analysis) (Ores--Analysis)

FURTOVA, Ye.V.; SADOVA, G.F.; ZAYKOVSKIY, F.V.; IVANOVA, V.N.

Photometric determination of the sum of rare earth elements in natural substances. Zhur. anal.khim. 18 no.12:1464-1467 D '63. (MIRA 17:4)

FURTOVA, Ye.V.; SADOVA, G.F.; IVANOVA, V.N.; ZAYKOVSKIY, F.V.

Photometric determination of thorium in natural materials with the use of arsenazo III. Zhur. anal. khim. 19 no. 1: 94-96 '64. (MIRA 17:5)

STOYANOV, P.A.; SADOVA, G.I.

Achromatization of the intermediate lense of an electron microscope.
Radiotekh. i elektron. 10 no.2:392-393 F '65. (MIRA 18:3)

SADOVA, K.V., st. nauchn. sotr.; CHERNIN, N.A., red.; SALOVSKIY, Ye.D., tekhn. red.

[Packaging of tea; collection of materials] Upakovka chaia; sbornik materialov. Kaluga, 1962. 21 p. (MIRA 17:3)

1. Kaluga. TSentral'nyy nauchno-issledovatel'skiy institut tary i upakovki. 2. TSentral'nyy nauchno-issledovatel'skiy institut tary i upakovki, Kaluga (for Sadova).

SADOVA, N. I.; VILKOV, L. V.

"On the dependence of the length of the central carbon-carbon bond on the angle of the twist of conjugated groups."

report submitted FOr 6th Gen Assembly, Intl Union of Crystallography, Rome, 9 Sep 63.

Chemical Dept, Moscow State Univ.

VILKOV, L.V.; SADOVA, N.I.

Electron diffraction study of the structure of phenylcyclopropane molecules. Dokl. AN SSSR 162 no.3:565-568 My '65. (MIRA 18:5)

1. Moskovskiy gosudarstvennyy universitet im. M.V.Lomonosova. Submitted November 9, 1964.

L 63046-65 EWT(m)/EPF(c)/EWG(m)/EWP(j)/T Pc-4/Pr-4 DS/WW/JAJ/RM

ACCESSION NR: AP5017787 UR/0080/65/038/007/1643/1646
66.074.7+547.538.141+547.315.2'532 30 B

AUTHOR: Tevlina, A. S.; Sadova, S. F.

TITLE: Ion exchangers of macroporous structure based on copolymers of styrene and divinylbenzene

SOURCE: Zhurnal prikladnoy khimii, v. 38, no. 7, 1965, 1643-1646

TOPIC TAGS: ion exchanger, styrene copolymer, divinylbenzene copolymer, copolymerization, sulfonation, phosphorylation

ABSTRACT: It was found that the structure and permeability of a cross-linked copolymer of styrene and divinylbenzene could be altered by carrying out a granular copolymerization in the presence of small amounts of the solvent carbon tetrachloride. Styrene-divinylbenzene copolymers thus obtained are deeply penetrated by reagents, so that high rates of chemical conversion can be achieved. A study of the kinetics of sulfonation and phosphorylation reactions for various copolymers revealed that the processes of chemical conversion proceed not only on the surface, but also inside the granules. It was shown that the sulfonation processes can be carried out without preliminary swelling of the co-

Card 1/2

L 63046-65
ACCESSION NR: AP5017787

polymer in the solvent, particularly in dichloroethane; this simplifies the production of sulfonated cation exchangers considerably. Orig. art. has: 4 figures and 1 table.

ASSOCIATION: None

SUBMITTED: 23Nov63 ENCL: 00 SUB CODE: OC, MT

NO REF SOV: 004 OTHER: 002

jlk
Card 2/2

SADOVAYA N. K.

Transformations of 3,3-dimethylfuranidine into 3,3-dimethylthiophane and 3,3-dimethylpyrrolidine. XL. Yu. K. Yur'ev, G. Ya. Kondrat'eva, and N. K. Sadovaya (M. V. Lomonosov State Univ., Moscow). *Zhur. Obshchei Khim.* 23, 844-6(1953); cf. *C.A.* 46, 11177*b*.—*$Me_2C(CN)$-$CH(CN)CO_2Et$*, b_{23} 152-6°, n_D^{20} 1.4382, d_{20} 1.0480, hydrolyzed with HCl gave *$HO_2CCMe_2CH_2CO_2H$*, 75%, m. 139-40°, which with EtOH-HCl gave 62% *di-Et ester*, b_{16} 101°, n_D^{20} 1.4233, d_{20} 0.9036, reduced with Na-EtOH to 63% *2,2-dimethyl-1,4-butanediol*, b_4 117°, n_D^{20} 1.4513, d_{20} 0.9739. This (9.2 g.) and 0.9 g. powd. aluminosilicate catalyst heated in a distn. app. to 180-90° gave 95% *3,3-dimethylfuranidine* (I), b_{750} 98-9°, n_D^{20} 1.4121, d_{20} 0.8455. I (10.6 g.) passed over Al_2O_3 in a H_2S atm. at 350° at 10 drops/min. gave 73% *3,3-dimethylthiophane*, b_{750} 144-6°, n_D^{20} 1.4801, d_{20} 0.9371. I passed over Al_2O_3 in an NH_3 atm. at 325° gave 11% *3,3-dimethylpyrrolidine*, b_{750} 110-11°, n_D^{20} 1.4380, d_{20} 0.8422. Blanc's [*Bull. soc. chim.* 33, 879(1906)] identification of I is erroneous.

G. M. Kosolapoff

SADOVAYA, N.K

4

Transformations of 3,3-dimethylfuranidine into 3,3-dimethylthiophane and 3,3-dimethylpyrrolidine. XL. Yu. K. Yur'ev, G. Ya. Kondrat'eva, and N. K. Sadovaya. *J. Gen. Chem. U.S.S.R.* 23, 883-5(1953)(Engl. translation). —See *C.A.* 48, 3955i.

H. L. H.

5

YUR'YEV, Yu.K.; SADOVAYA, N.K.

Chemistry of selenophene. Part 2. Acylation of 3,4-dimethylseleophene by tetraacyloxysilanes. Zhur.ob.khim. 26 no.3:930-933 Mr '56.
(MLRA 9:8)

1. Moskovskiy gosudarstvennyy universitet.
(Selenophene) (Silane) (Acylation)

SADOVAYA, N. K.

Chemistry of selenophene. II. Acylation of 3,4-dimethylselenophene with tetraacyloxysilanes. Yu. K. Yur'ev and N. K. Sadovaya. *J. Gen. Chem. U.S.S.R.* 26, 1057-9(1956)(English translation).—See *C.A.* 50, 14706e.
B. M. R.

Chem

2

SADOVAYA, N. K.

Chem

Chemistry of selenophene. IV. Iodination and metallation of selenophene and its homologs. Selenophenecarboxylic acids. Yu. K. Yur'ev and N. K. Sadovaya (State Univ., Moscow). *Zhur. Obshchei Khim.* 26, 3164-7(1956); cf. *C.A.* 51, 5037h.—Selenophene (I) (6.5 g.) in 25 ml. C_6H_6 treated gradually and alternately with 12.6 g. iodine and 8.7 g. yellow HgO, the soln. washed with $Na_2S_2O_3$ and H_2O, evapd., and the residue allowed to stand over HgO to remove evolving iodine, and distd. *in vacuo* over powd. Cu in a N atm. gave 52% *2-iodoselenophene* (II), b_{11} 84-4.5°, n^{20}_D 1.6902, d_{20} 2.3942 (the product is red after distn. and the traces of iodine are removable by keeping it over HgO). Similarly were prepd. the following I: *2-iodo-3-methyl*, 58%, b_{11} 93-3.5°, 1.6661, 2.2522; *5-iodo-2,4-dimethyl*, 60%, b_{11} 115-16°, 1.6455, 2.0492; *2-iodo-3,4-dimethyl*, 52%, b_{11} 122-3°, 1.6478, 2.0063. To PhLi soln. from 7.5 g. PhBr and 0.7 g. Li in Et_2O under a N atm. was added 5 g. II and the mixt. refluxed 15 min., and treated with Dry Ice, then with aq. HCl, yielding 57% *2-selenophenecarboxylic acid*, m. 110-20°. Similarly were prepd.: *3-methyl-2-selenophenecarboxylic acid*, 60%, m. 133-4°; 52% *2,4-dimethyl-5-selenophenecarboxylic acid*, decomp. 177-7.5°; and 61% *3,4-dimethyl-2-selenophenecarboxylic acid*, decomp. 183.5-4°. O. M. Kosolun

YUR'YEV, Yu.K.; MEZENTSOVA, N.N.; SADOVAYA, N.K.

Progress in the chemistry of selenophene. Vest. Mosk.un.Ser.mat. mekh. astron. fiz. khim. 12 no.4:201-222 '57. (MIRA 11:5)

1.Kafedra organicheskoy khimii Moskovskogo gosudarstvennogo universiteta.

(Selenophene)

Sadovaya, N.K.

Distr: 4E4j/4E3d

Chemistry of selenophene. VI. Aminomethylation of ketones of the selenophene series. Yu. K. Yur'ev and N. K. Sadovaya (State Univ., Moscow). *Zhur. Obshchei Khim.* 27, 1637-40(1957); cf. *C.A.* 51, 12878b.—Refluxing the selenophene ketones with $Me_2NH \cdot HCl$, paraformaldehyde, and abs. EtOH 3-4 hrs. gave the following aminomethylation products: 54% *2-dimethylaminoethyl 2-selenienyl ketone HCl salt*, m. 168-9°, from Me 2-selenienyl ketone; 67% *2-dimethylaminoisopropyl 2-selenienyl ketone HCl salt*, m. 150°, from Et 2-selenienyl ketone; 57% *2-dimethylaminoethyl-3-methyl-2-selenienyl ketone HCl salt*, m. 154-5°, from Me 3-methyl-2-selenienyl ketone; 50% *2-dimethylaminoisopropyl 3-methyl-2-selenienyl ketone HCl salt*, m. 138-9°, from Et 3-methyl-12-selenienyl ketone; 45% *2-dimethylaminoethyl 2,4-dimethyl-5-selenienyl ketone HCl salt*, m. 151-2°, from Me 2,4-dimethyl-3-selenienyl ketone; 50% *2-dimethylaminoethyl 3,4-dimethyl-2-selenienyl ketone HCl salt*, m. 183°, from Me 3,4-dimethyl-2-selenienyl ketone. The amino ketone HCl salt in MeOH added over 5-10 min. to 40% NaOH and $PhNHNH_2$ in MeOH gave after refluxing 1 hr. the following pyrazoline derivs.: *1-phenyl-3-(2-selenienyl)pyrazoline*, m. 117°; *1-phenyl-3-(3-methyl-2-selenienyl)pyrazoline*, m. 121-2°; *1-phenyl-3-(2,4-dimethyl-5-selenienyl)pyrazoline*, m. 110-11°; *1-phenyl-3-(3,4-dimethyl-2-selenienyl)pyrazoline*, m. 123-4°. *Me 3-methyl-2-selenienyl ketone*, b_{15} 119-20°, n_D^{20} 1.5930, d_{20} 1.4803; *Et 3-methyl-2-selenienyl ketone*, m. 38-9°; *Me 2,4-dimethyl-5-selenienyl ketone*, b_{16} 121.5-2°, n_D^{20} 1.5849, d_{20} 1.4042.

G. M. Kosolapoff

1/1

AUTHORS: Yur'yev, Yu. K., Sadovaya, N. K., 79-28-3-12/61
Gal'bershtam, M. A.

TITLE: Selenophene Chemistry (Khimiya selenofena)
X. Synthesis of the 3-methylselenophene-2-Aldehyde and
2,3-as Well as 2,4-Dimethylselenophene
(X. Sintez 3-metilselenofen-2-al'degida i 2,3- i 2,4-
dimetilselenofena)

PERIODICAL: Zhurnal Obshchey Khimii, 1958, Vol. 28, Nr 3, pp. 620-624
(USSR)

ABSTRACT: In the iodination and reaction with metallo-organic compounds of the selenophene nucleus in 3-methylselenophene and 2,4-dimethylselenophene (Ref 3) the authors assumed in consequence of the analogous structure of seleno- and thiophene that there must be also an analogy with respect to their chemical properties. Therefore they assumed a priori that in the 3-methylselenophene the substitution of hydrogen by iodine is accompanied by the formation of 2-iodo-3-methylselenophene, which after the action of lithium phenyl and after carbonization converts to 3-methyl-

Card 1/3

Selenophene Chemistry 79-28-3-12/61
X. Synthesis of the 3-methylselenophene-2-Aldehyde and
2,3-as Well as 2,4-Dimethylselenophene

selenophene-2-carboxylic acid. They also concluded that in the iodination of 2,4-dimethylselenophene the substitution of hydrogen by iodine in the position 5 of the nucleus takes place at a formation of 5-iodo-2,4-dimethylselenophene. Therefore, after its metal reaction and carbonization they attributed to the final product the structure 2,4-dimethylselenophene-5-corboxylic acid. The proof had, however, to be given that in the presence of a methyl group in the position 3 of the selenophene nucleus halogenation and mercurization actually take place in the position 2 and that also with 2,4-dimethylsilenophene this substitution reaction takes place in position 5. In the present work convincing proof is furnished for this orientation with regard to 3-methyl- and 2,4-dimethylselenophene in the iodination and mercurization. For the synthesis of 2,4-dimethylselenophene the authors used the 2-methylpentene-3, which was added to the reaction with selenium dioxide in the presence of chromium oxide and aluminum oxide, as well as to the reaction with metallic selenium (see mentioned reaction process). From this can be seen that from the step-by-step process only

Card 2/3

Selenophene Chemistry 79-28-3-12/61
X. Synthesis of the 3-methylselenophene-2-Aldehyde and
2,3-as Well as 2,4-Dimethylselenophene

one 2,4-dimethylselenophene could be obtained. For the synthesis of 2,3-dimethylselenophene the 3-methylselenophene was used the formulation of which leads to an aldehyde to which the structure 3-methylselenophene-2-aldehyde was attributed; this could be supported by experiments. This aldehyde converts to 3-methylselenophene-2-carboxylic acid in oxidation, and to 3-methylselenophene-2-carbinol in reduction. In the investigated reactions of halogenation, mercurization and formulation of 3-methylselenophene it was also proved that the substitution of hydrogen takes place in the position 2 of the selenophene cycle (see formulae).
There are 8 references, 7 of which are Soviet.

ASSOCIATION: Moskovskiy gosudarstvennyy universitet
(Moscow State University)

SUBMITTED: February 4, 1957

Card 3/3

SOV/79-28-8-34/66

AUTHORS: Yur'yev, Yu. K., Sadovaya, N. K.

TITLE: Chemistry of Selenophene (Khimiya selenofena) XI. α-Iodoselenophenes in the Organo-Iodine Magnesium Synthesis of Selenophene-α-Carboxylic Acids (XI. α-Yodselenofeny v magniyorganicheskom sinteze selenofen-α-karbonovykh kislot)

PERIODICAL: Zhurnal obshchey khimii, 1958, Vol. 28, Nr 8, pp. 2162-2164 (USSR)

ABSTRACT: Whereas Umezawa (Umezava) in his paper on the halogenation of the selenophene nucleus (Ref 1), claims that 2-halogen selenophenes, in particular 2-iodoselenophene, show almost no Grignard (Grin'yar) reaction with magnesium, the authors have established, in their present paper, that magnesium can form iodine magnesium selenophenes in dry ether. This reaction, however, requires an activation of the reaction with ethylene bromide and a slow addition of 2-iodoselenophene to magnesium, the ether solution boiling continuously. Carboxylation of the resulting 2-iodomagnesium selenophenes furnishes the corresponding α-carboxylic acids of the selenophene series, which are identical with those synthesized

Card 1/2

Chemistry of Selenophene. XI. α-Iodoselenophenes in SOV/79-28-8-34/66
the Organo-Iodine Magnesium Synthesis of Selenophene-α-Carboxylic Acids

by the authors on an earlier occasion (Ref 2) (Reaction diagram). The same experiment with 2-bromoselenophene was unsuccessful. The dissociation constants of selenophene-2-carboxylic acid and of benzoic acid were determined in 80 percent ethyl alcohol at 20°, using a potentiometer L.P.-5 ((L.P-5)) with a glass electrode. Selenophene-2-carboxylic acid was shown to be ten times as strong as benzoic acid (Table 2). Table 1 illustrates the synthesis of selenop[illegible]e-α-carboxylic acids. There are 2 tables and 3 references, 1 of which is Soviet.

ASSOCIATION: Moskovskiy gosudarstvennyy universitet (Moscow State University)

SUBMITTED: July 5, 1957

Card 2/2

AUTHORS: Yur'yev, Yu. K., Sadovaya, N. K., Titov, V. V. SOV/79-28-11-30/55

TITLE: The Chemistry of Selenophene (Khimiya selenofena) XIII. Cyano-Ethylation of the Ketones of the Selenophene Series (XIII. Tsianetilirovaniye ketonov ryada selenofena)

PERIODICAL: Zhurnal obshchey khimii, 1958, Vol 28, Nr 11, pp 3036 - 3041 (USSR)

ABSTRACT: In an earlier paper (Ref 1) the authors succeeded to amino-methylate the ketones of the selenophene series according to Mannich (Mannikh), which led to some β-dimethyl-aminoalkyl-(selenienyl-2)-ketones. In the present paper they continue the investigation of the reactivity of these ketones and attempted to carry out their cyano-ethylation. The cyano-ethylation of the 2-acyl selenophenes that do not have alkyl radicals in the position 3 takes place quantitatively on the action of acrylonitrile in the presence of an alkyl alcoholate. In this way the following δ-ketone nitriles of the selenophene series were obtained: 1',1',1'-tri(cyano-ethyl)-2-aceto-selenophene,

Card 1/3

The Chemistry of Selenophene. XIII. Cyano-Ethylation of the Ketones of the Selenophene Series SOV/79-28-11-30/55

1',1'-di(cyano-ethyl)-2-propioselenophene, and 1'-methyl-1'-cyano-ethyl-2-propioselenophene. The cyano-ethylation of the 3-methyl-2-acyl selenophene does not take place, apparently because of the difficulties in the spatial arrangement. Only in the case of the 3-methyl-2-acetoselenophene a reaction took place, however, with a smaller yield of 3-methyl-1',1',1'-tri(cyano-ethyl)-2-acetoselenophene. In the alkaline hydrolysis of the δ-ketonitriles of the selenophene series δ-ketonic acids unknown before in this series were obtained: 1',1',1'-tri-(carboxy-ethyl)-2-acetoselenophene, 1',1'-di(carboxy-ethyl)-2-propioselenophene, 1-methyl-1'-carboxy-ethyl-2-propioselenophene and 3-methyl-1',1',1'-tri-(carboxy-ethyl)-2-acetoselenophene (Scheme 1). The reduction of the 1'-methyl-1'-cyano-ethyl-2-propioselenophene with formic acid according to the method by A.N.Kost and his collaborators (Ref 8) the 3,3-dimethyl-2-(selenienyl)-piperidon-6 was synthesized (Scheme 2). In the synthesis of the

Card 2/3

The Chemistry of Selenophene. XIII. Cyano-Ethylation of the Ketones of the Selenophene Series SOV/79-28-11-30/55

2-isobutyroselenophene, 3-methyl-2-isobutyroselenophene, and similar selenophenes it became evident that the silicic anhydrides of the saturated m[illegible]valent organic acids are convenient acylation agents of the selenophene nucleus, which is also the case in the synthesis of the ketones with ramified radicals. There are 12 references, 8 of which are Soviet.

ASSOCIATION: Moskovskiy gosudarstvennyy universitet (Moscow State University)

SUBMITTED: September 20, 1957

Card 3/3

5(3) SOV/79-29-6-44/72

AUTHORS: Yur'yev, Yu. K., Sadovaya, N. K., Gal'bershtam, M. A.

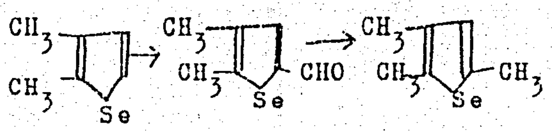
TITLE: Chemistry of Selenophene (Khimiya selenofena). XVIII. Synthesis of the Isomeric Trimethyl Selenophene and of Tetramethyl Selenophene (XVIII. Sintez izomernykh trimetilselenofenov i tetrametilselenofena)

PERIODICAL: Zhurnal obshchey khimii, 1959, Vol 29, Nr 6, pp 197o - 1973 (USSR)

ABSTRACT: The authors continued their investigation on the methyl homologues of selenophene (Ref 1). They made use of the possibility of a subsequent formylation of the selenophene and the reduction of the aldehyde group into the methyl group for the synthesis of the trimethyl selenophene and of tetramethyl selenophene, hitherto unknown. The synthesis of 2,3,5-trimethyl selenophene was based on 2,3-dimethyl selenophene which, by the action of dimethyl formamide, led to the 2,3-dimethyl selenophene-5-aldehyde. This aldehyde yielded the 2,3-dimethyl selenophene-5-carboxylic acid in the case of oxidation with silver oxide. In the reduction according to the general method by Kizhner (Ref 3) the 2,3,5-trimethyl selenophene was obtained.

Card 1/3

Chemistry of Selenophene. XVIII. Synthesis of the Isomeric Trimethyl Selenophene and of Tetramethyl Selenophene SOV/79-29-6-44/72



3,4-dimethyl selenophene served as initial product for the synthesis of 2,3,4-trimethyl selenophene. Its formylation yielded 3,4-dimethyl selenophene-2-aldehyde the oxidation of which led to the 3,4-dimethyl-selenophene-2-carboxylic acid. In the reduction of 3,4-dimethyl selenophene-2-aldehyde 2,3,4-trimethyl selenophene was obtained, which served as initial product for the synthesis of tetramethyl selenophene. In the formylation of 2,3,4-trimethyl selenophene 2,3,4-trimethyl selenophene-5-aldehyde was obtained, which in the case of oxidation formed 2,3,4-trimethyl selenophene-5-carboxylic acid, in the case of reduction 2,3,4,5-tetramethyl selenophene (Scheme 2). From the two isomeric trimethyl selenophene only 2,3,4-dimethyl selenophene yielded the 5-chloro mercuri-2,3,4-trimethyl selenophene by means of mercurization; the 2,3,5-trimethyl selenophene did not enter this reaction. There are 7 Soviet references.

Card 2/3

Chemistry of Selenophene. XVIII. Synthesis of the Isomeric Trimethyl Selenophene and of Tetramethyl Selenophene SOV/79-29-6-44/72

ASSOCIATION: Moskovskiy gosudarstvennyy universitet (Moscow State University)

SUBMITTED: May 9, 1958

Card 3/3

YUR'YEV, Yu.K.; SADOVAYA, N.K.; LYUBIMOVA, Ye.N.

Chemistry of selenophene. Part 30: chloromethylation of ketones of the selenophene series. Zhur.ob.khim. 30 no.8:2732-2737 Ag '60. (MIRA 13:8)

1. Moskvoskiy gosudarstvennyy universitet.
(Selenophene) (Chloromethylation)

YUR'YEV, Yu.K.; SADOVAYA, N.K.

Chemistry of selenophene. Part 34: Reduction of ketones of the selenophene series. Zhur. ob. khim. 31 no. 11:3535-3536 N '61. (MIRA 14:11)

1. Moskovskiy gosudarstvennyy universitet imeni M.V. Lomonosova.
(Ketones) (Selenophene)